

What is claimed is:

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1. A method for providing enhanced dial-up capabilities to a network connection, comprising the steps of:
    - establishing an audio connection between a telephone and a dial server;
    - processing information conveyed by the audio connection to the dial server to obtain a telephone number; and
    - forwarding that telephone number to a gateway that has a connection to a network.
  2. The method of claim 1, wherein the audio connection is formed across the gateway.
  3. The method of claim 1, further comprising the step of passing the telephone number from the gateway to a call agent.
  4. The method of claim 1, wherein Voice over Internet Protocol is used to communicate with the network.
  5. The method of claim 1, wherein the connection to the gateway is established using media gateway control protocol.
  6. The method of claim 1, wherein the network is attached to the Internet.

Docket: D2647

7. The method of claim 1, wherein the network is attached to a PSTN.
8. The method of claim 1, wherein the network is attached both to an internet and to PSTN.
9. The method of claim 1, wherein the audio contains DTMF tones.
10. The method of claim 1, wherein the audio comprises voice, and the Dial Server analyzes the voice to associate it with a telephone number.
11. An apparatus for providing enhanced dial-up capabilities to a network connection, comprising:
- a telephone;
  - a gateway connected to the telephone; and
  - a dial server connected to the gateway;
- wherein the dial server is capable of processing information conveyed by an audio connection with the telephone to obtain a telephone number, which it is capable of forwarding to the gateway.
12. The apparatus of claim 11, wherein the audio connection is formed across the gateway.

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Docket: D2647

13. The apparatus of claim 10, further comprising a call agent to which the telephone number is passed from the gateway.

14. The apparatus of claim 10, wherein the network is attached both to the Internet and to PSTN.

15. The apparatus of claim 10, wherein the network is attached both to an IP network and to PSTN.

16. The apparatus of claim 1, wherein the audio contains DTMF tones.

17. The apparatus of claim 1, wherein the audio comprises voice, and the Dial Server has the ability to analyze the voice so that it can associate it with a telephone number.

18. An apparatus for providing enhanced dial-up capabilities to a network connection, comprising:

a gateway for packetizing audio; and

a dial server connected to the gateway;

wherein the dial server is capable of processing audio information conveyed by an audio connection to a telephone to obtain a telephone number, which the dial server then forwards to the gateway.

Docket: D2647

19. The apparatus of claim 18, further comprising a call agent for forwarding traffic from the gateway to a network.

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